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RESEARCH VISIBILITY. VOCATIONAL EDUCATION IS PEOPLE--YOUTH AND ADULTS UNEMPLOYED OR AT WORK.

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TWELVE RESEARCH REVIEWS IN THIS ISSUE PERTAIN TO YOUTH AND ADULTS UNEMPLOYED OR AT WORK, ONE OF THE MAJOR AREAS OF CONCERN IDENTIFIED BY THE PANEL OF CONSULTANTS ON VOCATIONAL EDUCATION. THEY ARE ORGANIZED UNDER THE TOPICS--(1) EXPANDING EDUCATION AND TRAINING OPPORTUNITIES WHICH INCLUDES PATTERNS OF ADULT INFORMATION SEEKING, PREDICTION OF MANPOWER AND DEVELOPMENT TRAINING ACT PROGRAM OUTCOMES, AND TRAINING OF HOME ECONOMISTS FOR WORK WITH ADULTS, (2) INNOVATIVE PROGRAMS WHICH INCLUDES ADULT TRAINING AND RETRAINING, INFLUENCES OF SELECTED FACTORS ON ADULT TRAINING, AND CHILD DEVELOPMENT AND GUIDANCE KNOWLEDGE NEEDED BY MOTHERS AND CHILD CARE WORKERS, (3) EXPANDING AND IMPROVING APPRENTICE PROGRAMS WHICH TREATS NEGRO PARTICIPATION IN APPRENTICE PROGRAMS, (4) UTILIZING TOTAL EDUCATIONAL RESOURCES WHICH INCLUDES FUNCTIONAL ILLITERATES IN ALABAMA, ADULT LITERACY MATERIALS AND PROGRAMS, AND A SPANISH LANGUAGE ADULT INTELLIGENCE SCALE, AND (5) GUIDANCE AND PLACEMENT SERVICES WHICH INCLUDES CAREER DEVELOPMENT, DROPOUT IDENTIFICATION AND PREVENTION, AND VARIABLES INVOLVED IN JOB SUCCESS OR FAILURE. "PLAIN TALK," A CONTINUING COLUMN BY THE AUTHOR, DISCUSSES ASPECTS OF ADULT EDUCATION SUCH AS RESEARCH NEEDED AS A BASIS FOR DETERMINING ADULT VOCATIONAL EDUCATION OFFERINGS AND CRITERIA FOR EVALUATING SUCH PROGRAMS AND PROBLEMS OF INITIATING EFFECTIVE PROGRAMS. THE BIBLIOGRAPHY LISTS 17 RELATED STUDIES WHICH ARE IN PROGRESS. THIS ARTICLE IS PUBLISHED IN THE "AMERICAN VOCATIONAL JOURNAL," VOLUME 42, NUMBER 12, DECEMBER 1967. (EM)

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"Research Visibility" is a research project of the American Vocational Association. The purpose is to give visibility to significant research, experimental, demonstration and pilot programs, upgrading institutes, seminars and curriculum and other leadership development activities for teachers, supervisors and administrators. The "Research Visibility" report synthesizes important projects which have been reviewed, selected and analyzed for their value to vocational, technical and practical arts educators, guidance personnel, and other leaders in education, manpower and related fields. A comprehensive compilation of significant research and developmental materials is included.

The project is cooperatively financed by the American Vocational Association and a Vocational Education Act of 1963 grant (OEG 2-7-062078, project 6-[illegible]: "Synthesis and Application of Research Findings in Vocational Education").

VOCATIONAL EDUCATION IS PEOPLE . . .

When speaking of the vocational training needs of out-of-school youth and adults, the Panel of Consultants noted the restrictive aspects of the Smith-Hughes and George-Barden Acts, which limited instruction to updating or upgrading workers already employed. The Panel recommended that training opportunities for youth and adults should be expanded by developing programs to adjust the skills of the labor force to changing needs of the economy. Particular emphasis was made for retraining the unemployed and for increasing the number of occupations for which training is provided.

It was further recommended that apprenticeship programs should be expanded and improved by encouraging apprenticeship training for both traditional and other occupations; requiring related instruction for all apprenticeships; maintaining updated instruction materials and equipment, and using the joint apprenticeship committees representing management and labor.

Unfortunately, there seems to be no U. S. Office of Education sponsored studies dealing with apprenticeship. Although considerable research on apprentice training has been done by college departments of industrial management and labor relations, and also by the U. S. Department of Labor, this important realm of the vocational program has not caught the attention of educational researchers.

Since no U.S.O.E. sponsored projects are available, there is included in this issue of "Research Visibility" a review of the book, *The Negro and Apprenticeship*, which is based on a

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Youth and Adults Unemployed or at Work

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Dr. Gordon F. Law is editor of "Research Visibility." The organization for this department of the JOURNAL, the pattern for reporting and the writing represent his work.

...conducted by F. Ray ... and Vera A. Palmer for ... Education in Indus... This i... ...ed, that could contain... ...ive process with interest in ... education. It is also disturbing ... ...ound very small propor... ... Negroes in certain skilled ... Although racial discrimination ... an important contribut... ... a variety of other complex ... related reasons why so few ... have participated in appren... training are cited.

Studies reported in this issue have been organized into five main topics, in addition to the major theme, "Youth and Adults Unemployed or at Work." These topics are:

1. Expanding Education and Training Opportunities Commensurate With Needs of the Labor Force.

2. Innovative Programs, Methods, Materials, Techniques.

3. Expanding and Improving Apprentice Programs.

4. Utilizing Total Educational Resources (Vocational and General) To Adequately Provide Vocational Opportunities for Employed and Unemployed Workers.

5. Guidance and Placement Services and Follow-up Studies.

The reports that are included under each topic have been derived from completed and available studies. Other investigations still in process and not yet available through the ERIC system are given in the Bibliography. (See pages 17 and 18.)

In September 1967, the ERIC Clearinghouse on Vocational and Technical Education issued the first of a continuing series of publications. The two publications, known as, "Abstracts of Research and Related Materials in Vocational and Technical Education" (ARM) and as, "Abstracts of Instructional Materials in Vocational and Technical Education" (AIM), are issued quarterly (Fall, Winter, Spring, and Summer).

ARM incorporates abstracts of research and other materials which are useful to a wide audience of persons interested in vocational and technical education. AIM includes abstracts of materials typically designed for teacher use or student use in the classroom, and annotations of bibliographies or lists of instructional material. AIM will be of particular interest to teachers, curriculum specialists, supervisors and administrators involved in the use of instructional materials in the teacher-learning setting, or in curriculum development.

Subscriptions are available at $9.00 per year for each publication. Individual issues are $2.75. Order forms should be requested from Publications Clerk, The Center for Vocational and Technical Education, 980 Kinnear Road, Columbus, Ohio 43212.

TOPIC ONE: Expanding Education and Training Opportunities

(21) "PATTERNS OF ADULT INFORMATION SEEKING" BY EDWIN B. PARKER. STANFORD UNIVERSITY, STANFORD, CALIF. (PROJECT # 5-0363) 1966. ERIC # ED 010 294. MF $0.25 HC $11.00. 177 PAGES.

The introduction to the Stanford University study of information-seeking patterns by adults stated that "few studies have been undertaken to determine the scope and depth of adult education." Most have been limited in their generalizations by the character of the educational institutions and by geographical area. "One exception was the general description of adult participation in formal and informal educational pursuits undertaken on a national scale by Johnstone and Rivera of the National Opinion Research Center and published in 1965."

Among the Johnstone and Rivera findings was information that participation in adult education programs is skewed toward higher socioeconomic status, suburban living and support of a family in middle or upper-middle life style. Previous studies reported these same trends.

In this study of two contrasting California communities, the investigation sought to discover where adults turn for educational information on various topics, "what kinds of people seek what kinds of information through what channels?"

A structured schedule was used for interviewing 575 San Mateo residents and 1,294 in Fresno. The schedule was divided into seven sections: mass media used and reasons for use; information seeking related to leisure activities; occupational information seeking; educational history; participation in adult education; projective values questions, and questions dealing with personal characteristics.

In both cities, the selection of interviewees was made through random sampling procedures. All data from the two surveys were transferred to punched cards and, later, magnetic tape for processing on the Stanford 7090 and B-5500 computers.

The section of the study which reports demographic correlates of participation in on-the-job training contains significant information.

"Many more than half the respondents reporting on-the-job training were under 40, but a certain number of respondents in their sixties also reported receiving this training. Participants are more likely than not to be relative newcomers to the community. . . . There are at least four distinct levels of participation in on-the-job training. Younger men are the most active, with higher education accounting for even greater activity among them. Next are the older men and the younger women with some college education. Third are older men and younger women with only high school education. Lastly, older women are very unlikely to have received on-the-job training, whatever their educational background."

Among other findings of the study is information that men made greater utilization of vocational instruction than women; attitudes toward prior schooling had little influence on adult participation; and educational level is a strong determinant of information-seeking. Adults at lower educational levels depend on broadcast media while those with college training seek information in print.

The concluding section of the study

nodes—are that the most useful findings of the report are perhaps not contained in the summary statements, but are to be found in the detailed tabulations of the diversity of information sought through a wide variety of channels by different kinds of people. Certainly the study does contain a wealth of statistical information that could not readily be presented through a summarization.

This report should be of interest for its well organized procedures as well as for the specific data that is extracted. Although readers are cautioned not to apply the adult information seeking findings in San Mateo and Fresno too literally to their own conditions, they could use this report for guidance when planning any similar study in a local situation.

1:2 "The Prediction of Outcomes of MDTA Programs: A Pilot Study" by Harold A. Edgerton and Robert W. Sylvester. Performance Research, Inc., Washington, D.C. (Project # 5-0127) 1966. ERIC # ED 010 011. MF $0.09 HC $1.52. 19 pages.

The success of training programs, such as those organized under the Manpower Development and Training Act, may in part be evaluated in terms of two important factors: the proportion of entrants who complete the course, and the number of graduates who are placed in appropriate jobs.

The Performance Research Corporation pilot study, while recognizing that many other measures of success can be identified, has concentrated on retention and placement of MDTA trainees in six major cities. To make the sample sufficiently homogeneous the following limitations were adopted:

1. Only MDTA programs approved during fiscal 1964 were used.

2. Only programs for which the Office of Manpower and Training had follow-up data were included.

3. In-school programs but not OJT were included.

4. Institutional training programs were excluded.

Data for the study came from two sources: follow-up data for each program obtained and organized by the Office of Manpower and Training, and by a questionnaire answered by program directors. Of the 312 questionnaires mailed, 222, or 71 percent, were completed and returned.

"Two codes were developed for recording the data on IBM cards. Plans for statistical treatment required that all data be in a form which would permit correlation with each of the criteria as well as with each of the other characteristics; hence, each coded item of information had to be expressed as a variable or as a dichotomy."

Two kinds of statistical evidence were produced for the study:

1. Correlations of each of 93 independent variables from the questionnaire and from the OMAT files with each criterion (retention and placement).

2. Combinations of independent or predictor variables for the best possible prediction of each criterion.

A stepwise regression was used to select a small number of variables having the highest correlations, after correction for chance factors, in making a purely statistical prediction of retention and placement rates for MDTA programs.

The investigators report that the results of this statistical analysis may be divided into two groups: those predictors which relate to the characteristics of trainees, and those which describe the program or its management.

"If the variables which relate to characteristics of trainees and also show significant correlation with either retention or placement were used to select trainees, the people selected would not fit the description of the people for whom the MDTA program was designed. According to the statistical evidence, if trainees are selected to show a high retention rate, those selected would have education at the twelfth grade level or higher. They would not be receiving public assistance nor have marketable skills, and would have had employment within the three months preceding the training program.

"These are not the people for whom the MDTA program was designed. The real problem is that of matching the program to the trainee rather than trying to select trainees to fit the training program."

Nine conclusions have been drawn relative to retention and placement in MDTA programs, the authors state that the "significant variables" of their investigation indicate that the following actions might well be taken:

—Reduce class size and reduce the trainee—teacher ratio

—Provide a sensible counseling program for the trainees, especially taking advantage of the instructor in his classroom relationship to the trainees

—Develop valid and acceptable ways of measuring progress in learning

—See that training is adjusted to the level and energies of the trainees

—Have course content and organization preplanned so that the instructor does not have to organize the course

—Be sure that financial allowances for trainees are adequate

—Have knowledge of the overall abilities of the trainees

—Make use of aptitude tests to aid in assignment and as an aid in performance evaluation

—See that the time demands of the course are reasonable

—Have available an estimate of the trainees' quality of work in the course

—Develop contacts with local industries to aid in placement

—Have a program of evaluation of instructor performance

—Select instructors who have had experience as workers in their field of instruction.

The next step recommended is to study more intensely and in greater detail the effects of program organization and administrative and instructional practices on both retention and placement.

It was suggested that retention and placement are not the only measures of a program's effectiveness. Many other factors need to be considered. These would include the educational and socio-economic level of trainees, family problems, trainee's age and physical condition, and regional transportation problems.

When considering these, it is necessary to keep in mind that the federal Manpower program is specifically de-

[illegible] Training Program for Service Homemakers To Train Adult and Older Youth for Homemaker Service Responsibilities. Baton Rouge, Louisiana State University, Baton Rouge, La. Project no. 5-43150 1967. (VT no. 62120) 61 pages.

In keeping with the expanding role of home economists in the education and aid of culturally disadvantaged people is the Louisiana State University training program for field service workers.

Twenty-eight qualified home economists were selected to attend a three-week work-shop at Louisiana State University during the summer of 1966. The program's purpose was to prepare participants for leadership in training adults and older youth to assume homemaker service responsibilities.

The local homemaker-home health aid training program consisted of an 80-hour course. The first 60 hours were spent in classroom instruction and evaluation of trainees. This was followed by 20 hours of supervised work experience in which trainees were placed in hospitals, nursing homes, private homes, and nursery schools.

Problem Areas

The workshop program was comprised of lectures, reports and discussions of research findings. Emphasis was placed on practical application of findings to individuals and family situations. Sixteen problem areas relating to the training of homemaking service workers were considered. Among these were:

1. Basic emotional, social and intellectual needs of family members and implications of working with families and individuals in communities differing in socio-economic and educational background.

2. Biological and physiological aspects of aging.

3. Personal care of the ill and aging; prevention and treatment of common illnesses.

4. Ways of giving assistance in families experiencing emergency situations disturbing to the life of family members.

5. Nutritional needs of family members. Meal planning and preparation with emphasis on special problems due to age or illness.

6. Care and guidance of children of various ages.

7. Contribution of social services and agencies and community service organization to families.

8. Teaching methods related to the training of adults and older youth.

9. Development of a syllabus to be used as a guide for training adults and older youth for homemaker service responsibilities.

10. Methods of arranging for supervised work experiences of adults and older youth.

11. Arrangements for placement and supervision of trained adults and older youth by one community agency.

12. Development of techniques to evaluate the training program.

Work Shop Materials

For each problem area, a consultant was asked to speak during the workshop. Copies of these supplementary materials and annotated course outlines were made available to each trainee. They are reproduced in this report.

Workshop participants reviewed the annotated course outline of the Homemaker Service Training Program and then proceeded to revise specific areas of study within the total outline, using a small group approach.

The organization of local training

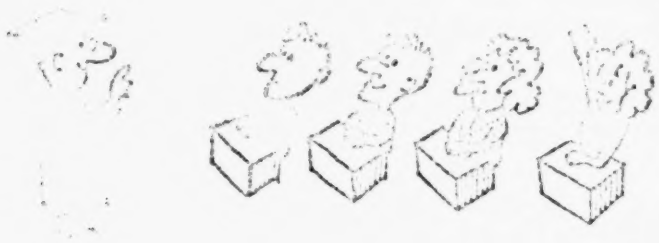
programs for homemaker service workers was varied in accordance with community situations and the size of the class. Steps taken in the development of a local program included the organization of a parish advisory committee; a publicity campaign; interviewing and screening applicants, and the actual conduct of the local homemaking training course.

A total of 12 findings and conclusions were developed through the workshop. These pertain to the function of state and parish advisory committees; the need for working relationships between various agencies; items referring to qualities of training personnel; instructional content and methods; and specific services rendered by trained homemakers.

The recommendations of the report stress the value of advisory committees, identify the need for additional publicity, the importance of frequent evaluation of trainees, and the need for strength in interpersonal relations at the local level.

Value

This report should be especially valuable to home economists, whether at the college or local level, in those states that do not have a similar program. The use of local women, presumably those not likely to have professional preparation beyond the training program discussed for homemaking services, presents some intriguing possibilities. It would be interesting to know, for example, whether a two-way learning process takes place between the professionally prepared home economist and the field worker she trains. Also, has the work that homemaking service persons do helped them to develop less stereotyped approaches to their own interpersonal and to their community relationships?



4:4 "Evaluation, Development and Demonstration in Adult Training and Planning" by Jacob Kaufman. The Pennsylvania State University, University Park, Pa. (Project # 5-0049; Grant # OEG-1-7-000049-0049. MF $0.65 HC $10.24. 150 pages.

A great variety of studies and activities, some completed and others in progress, are included in the overall scope of the Penn State study. The four general objectives of the project were to:

1. Ascertain if a university representative could act as a "change agent" in the initiation of a community action program.

2. Study the process of community action organization as a case study.

3. Involve existing institutions in development of a community action program.

4. Assist in the development of new programs.

A number of longitudinal studies, now in process, have been initiated as part of the total project. These include: (a) Experimental program to compare education versus skill training for young school dropouts. (b) Developmental program for an economic evaluation of vocational education. (c) Cost benefit analysis of vocational education. (d) Demonstration program to develop labor community specialists.

A research, development and demonstration program in the Mon-Yough Region, a deprived area which includes 31 communities in the southeast section of Allegheny County, Pa., is a major part of this report.

Part II of the report is a case study of the region, focusing on the people living there. Economic and social profiles were drawn up, including an estimate of decreasing population trends, aging population distributions, growing proportion of non-whites, ethnic composition, educational attainment, and structure of the labor force.

The main effort of the project was the creation of the Mon-Yough Community Action Committee, an intercommunity endeavor which was a new experience to the region. The report offers a blueprint of the phases of development and organization for community action. The last stage, synthesis, where other organizations are recruited and merged to form one organization, is significant in that the new organization grows through channels already established in the community.

Through informal organization and flexible objectives the committee became a "Gateway to Opportunity." The fundamental deficiency in the area was the lack of basic skills provided by public education. In 1964 an evening course granting high school equivalency was set up. A Headstart Program was initiated. Additional plans were being made for a permanent institution to help dropouts which would be an extension of the local public school system.

Additional activities initiated were:

1. A multi-functional community center, including adult education and work experience for teenagers.

2. Pre-vocational Opportunity Center for the Handicapped.

3. Information and referral center.

4. Project 44—to create part-time jobs for potential dropouts.

5. Organized play areas in housing projects operated by Vista workers.

6. Community action programs for municipalities.

Recommendations

Although the report asked to what extent federal legislation might be the basis on which the region could organize itself, it recognized that the community must be the locus of the war on poverty.

Still, a broad concern for the development, allocation and utilization of all levels of human resources is necessary for the formulation and implementation of public policies related especially to the disadvantaged. The relation between the disadvantaged and their environment must be ascertained. Consequently, there is a need for longitudinal studies to determine economic, psychological and sociological problems encountered by the disadvantaged.

The major recommendations were:

1. Need for more and better data in most areas and need to disaggregate data so its scope relates to appropriate levels of decision making.

2. Need for longitudinal studies in all of subject matter areas.

3. Great need for action-based and local studies in all areas.

4. Need for more evaluation of effects of on-going anti-poverty and other projects and building into them of individual and evaluative research.

5. Need to assess human resources and implications of major developments.

6. Need to disseminate research results to potential beneficiaries.

7. Great need for in-depth studies of present employer policies and practices relating to hiring, promotion, training incentives, and retirement.

8. Need to develop and relate effectively new or proven tools of analysis, especially cost-benefit, to appropriate problem areas.

This project, stimulating a number of research studies, some relevant to vocational education, and initiating community action development, is certainly vast and ambitious in scope. It is hoped that some plan for permanency can be evolved for the community action endeavors so that fluctuations associated with federal appropriations and funding will be eliminated. The process for transition from a "crash" program to a permanent one, operated mainly with local people and local funds, seems built into the project.

The "cost-benefit analysis of vocational education" now under way as part of one study, needs to be closely observed as such an approach to evaluation may have serious implications for all phases of education. Are cost accounting methods an appropriate measure of the subtle and intangible aspects of the educational process and its product? The findings of these and other long-term investigations will be awaited with interest.

4:5 "The Influence of Speed and Prior Knowledge and Experience on Adult Training" by Douglas D. Sjogren and Alan B. Knox. University of Nebraska, Lincoln, Nebr. (Project # 5-0011; 1965. ERIC # ED 003-190. MF $.27 HC $7.16. 112 pages.

The introduction to this experimental investigation states that adult educators have little information based on research to tell them how to design educational programs for adults so

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[illegible] experiments treating sex, attitudes, prior knowledge, and speed were controlled. Experimental groups were obtained from a stratified pool of 168 adults, classified into 24 cells with seven persons within each cell. Factors used in grouping were sex, socio-economic status (SES), previous participation in adult education and age. Three age groups were established: under 31, 31-44 and 45-65.

Recruitment of Adults

In order to fill all the groups or cells for the experimental design, several groups of adults were contacted including service clubs, business groups, labor unions, church groups, adult high school and college classes, and servicemen at a nearby air base. After hearing a description of the project, those still interested were asked to fill out a questionnaire that included questions pertinent to the classifications, a 15-item vocabulary test, and questions related to their knowledge about and interest in some possible topics for study in the project. From about 500 who attended the information session and completed the questionnaire, 211 adults were selected and were assigned to cells.

The first session in the project, a second session in the middle and the last session were each devoted to testing. A 108-item pretest of each of the topics studied was administered along with three standardized tests. The Strong Vocational Interest Blank, Poe Inventory of Values and McMahon 48 Item Counselor Evaluation Test were given for two purposes: (a) to obtain baseline information for using the sample in further longitudinal studies, and (b) to determine whether the scale scores on these instruments were correlated with the performance of adults in the project. The Wechsler Adult Intelligence Scale was administered individually to each subject to serve as a control variable and also to provide information for further study.

It was decided to use the "cells" of seven subjects as a sampling unit, rather than the individual participants. Detailed descriptions of analysis of variance procedures employed, statistical data derived and generalized results obtained for each of the four major experiments are reported.

Among the findings reported to have important implications for adult educators are the following:

"There is a lack of apparent relationship between the age and performance on any of the criterion measures. . . . The evidence was consistent with other research comparing the performance of adults of different ages conducted by Birren, 1963; and Knox and Sjogren, 1965.

"There is an apparent facilitative effect on performance of previous participation in adult education activities.

"The SES classification accounted for a significant portion of the variation on all but one of the achievement tests. . . . The one test in which no difference resulted was Russian; a topic with which neither SES group was familiar prior to the study.

"The SES classification did not yield consistent results across the experiments.

"The data from mental ability tests supports previous research by Birren, 1963, in which the level of performance or information, comprehension and verbal items tended to increase steadily with age, and the level of performance on perceptual and timed items tended to decrease with age."

Limiting Factors

The Limitations of the study state that the sample was not drawn randomly from a population of adults, hence generalization of findings to the total adult population is not justified. Also mentioned is the limiting factor that all study materials were programmed and investigated individually. Thus, generalizations to other types of educational activities should be made with caution.

This report should be of value to researchers interested in developing other studies relating to learning in adult education. It also should help administrators of adult programs as they make plans for appropriate curriculum materials and teaching methods. The positive relationship between age advancement and level of verbal comprehension supported by this and other research should be considered when preparing instructional materials for classes with wide differences in ages.

1:6 "AN EXPLORATORY STUDY OF KNOWLEDGES IN CHILD DEVELOPMENT AND GUIDANCE NEEDED BY MOTHERS AND WORKERS IN OCCUPATIONS RELATED TO CHILD CARE." BY RUTH E. WHITNAH. UNIVERSITY OF ILLINOIS, URBANA, ILL. (PROJECT # 5-0165) 1966. ERIC # ED 010 071. MF $0.27 HC $5.32. 106 PAGES.

This study attempted to:

1. Ascertain the knowledges in child development and guidance needed by mothers and by employees in selected occupations related to child care.

2. Identify those knowledges which are unique to the mother role and to the employee roles and those which are common to both.

3. Ascertain to what extent employment education in certain occupations which require knowledges and skills usually considered a part of the field of home economics can be included in separate courses.

"The main task of the investigation was to gather and analyze the opinions of practitioners and specialists in child development regarding the kind and depth of knowledge in child development and guidance needed by mothers and by employees as day care foster mothers, day care center directors and child care assistants."

The sample groups were taken from an 18-county area in Illinois. The instrument used in the study was an approved list of 63 items of knowledge in child development and guidance. Presented as a rating scale from one to five, the items were thought essential for the performance of a job. This list of knowledges was also designed to assist in curriculum development in home economics.

Also employed was a descriptive data questionnaire which asked the

...ment of [illegible] of experience and ... of courses taken in child ... performance. All the data, chiefly ... the opinions of practitioners and specialists, was tested statistically.

The conclusions drawn from the testing of null hypotheses are:

1. There are no differences between the professionals' and practitioners' opinions concerning the depth of understanding in 63 items of knowledge in child development and guidance needed by mothers and employees in occupations related to child care. Therefore, it may be assumed that practitioners are capable of making good judgments about knowledge needed to perform their jobs.

2. Mothers and employees in each of three occupations related to child care need different amounts of knowledge in child development and guidance.

The descriptive data questionnaires pertaining to formal education and the number of courses in child development revealed that professional groups had scores higher than the practitioners' groups with which they were compared.

The study refers to Dr. Elizabeth Simpson's proposal for curriculum development in home economics at the secondary level as a possible model. ("Projections in Home Economics Education," *American Vocational Journal, Vol.* 10, Nov., 1965., pp. 41-43). A curriculum would be organized around the three major purposes of home economics education:

1. Preparation for homemaking and family life

2. Preparation for employment in occupations utilizing home economics knowledge and skills

3. Motivation and recruitment of college-bound students for professional careers in home economics.

Importantly, Simpson recommends an area of commonality with a "roles of women" core.

It was the hope of the researchers that the findings from the summaries of knowledge in child development could be useful in determining which knowledges are common to all three purposes of home economics and which are unique to only one. Items common knowledge might be used in a core course while those items of knowledge which are unique might be included in advanced or specialized courses.

It was recommended that knowledge needed by mothers and employees in all three occupations related to child care be included in a core course. Items needed only by mothers should be included in homemaking. Items needed by employees should be included in courses emphasizing preparation for occupations. Items requiring considerable knowledge should be included in an in-depth second core course unit in child development and guidance.

As Simpson points out in the introduction to the report, there are factors other than knowledge, such as abilities, attitudes, socioeconomic conditions, student needs and the school situation, that must be considered in curriculum planning.

TOPIC THREE: Expanding and Improving Apprentice Programs

No U.S.O.E. sponsored projects reported.

The Negro and Apprenticeship BY F. RAY MARSHALL AND VERNON M. BRIGGS, JR., THE JOHNS HOPKINS PRESS, BALTIMORE, MD. 1967. 233 PAGES.

Apprenticeship, the traditional and established route to journeyman status in many skilled trades, has, for one reason or another, not been readily accessible to Negroes. Of the more than 50,000 apprenticeships made available each year in the United States, only a token number of Negroes has been admitted. As a result, a heated controversy developed during the late 1950's and early 1960's between civil rights spokesmen and the apprenticeship establishment.

The clashes between increasingly militant civil rights organizations and craft unions brought a focus of attention to the situation by governmental agencies and the press. Declining job opportunities in the unskilled occupations previously open to young Negro males and the corresponding sharp increases in Negro unemployment added a new sense of urgency to the problem.

In the summer of 1965, the Department of Economics of the University of Texas entered into a contract with the Office of Manpower, Automation and Training (OMAT, now known as the Office of Manpower Policy, Evaluation and Research) to undertake a study of Negro participation in apprenticeship programs. The project director, Professor F. Ray Marshall, his associate, Vernon M. Briggs, and 21 special interviewers studied the participation of Negroes in apprenticeship programs in 10 major cities with large Negro populations. This book is based on the study report.

The 10 large cities used for the study were selected to represent a variety of problems and geographical locations. Consultation with spokesmen for civil rights, government, industry, and labor unions was part of the selection process.

Since the investigators were primarily interested in "trouble spots" where civil rights organizations or governmental agencies were attacking or about to attack the apprenticeship establishment, they paid particular attention to those trades having the lowest number of Negro members. These included electricians, ironworkers, sheet metal workers, plumbing and pipe fitting trades, printing, and some mechanical trades in industrial plants.

In addition to examination of written documents and reports were a series of interviews with two groups of people. The first of these was comprised of representatives of a variety of governmental, union, management, civil rights, and other agencies. From this group the investigators sought to elicit background information, to gather names of potential Negro interviewees, to seek suggestions for remedial action, and to verify conflicting reports. In most instances, these reports were conducted by the director and associate director.

The second group of interviewees consisted of Negroes

...ed in apprenticeship pro-
...all of whom were their applications, rejected
...of apprenticeship program dropouts, or
...had failed to complete the application
...without any initial interest.

...that the U. S. Census Bureau reported
...constituted 1.9% percent of apprentices in the
...for 1950 and 2.52 percent in 1960, the study
...of the virtual absence of Negroes from appren-
...ticeship programs until 1960. Studies in California and
...New York found that only 1.9 and 2.0 percent of appren-
...tices were Negroes. New Jersey and Connecticut had .5 and
...percent respectively. A survey of 1,000 apprentices in
...Florida failed to identify a single Negro. And so
on . . .

A variety of reasons was found for the very small proportion of Negro apprentices. The authors state, "Although the reasons why so few Negroes are represented in apprenticeship training are easy to list, it is much more difficult to assign weights to each of the factors in the complex constellation of causes. Civil rights groups have emphasized discrimination as a causal factor, while unions stressed lack of qualified Negroes. Specialized government agencies often add to the confusion by supporting the civil rights leaders (if they are antidiscrimination organizations) or the industry (if they are apprenticeship officials)."

The book reports that although racial discrimination continues to be an important factor, there are other causes as well. It is pointed out that unions have traditionally been exclusive, even when race was not a consideration. Other reasons here noted are: the principle of labor shortage; quality control; politics and nepotism. "Craft unionists argue that their sons and relatives are more likely to have this feeling of craftsmanship than a youngster "off the street" who is merely looking for a job and often has been marked down on this point by apprenticeship selection committees.

The final recommendation made is that city governments have important roles to play in increasing the number of Negro apprentices. Among the specific activities suggested for city governments are the establishment of a human relations agency, withholding of city funds from building projects which exclude qualified Negroes, operation of mediation facilities and the maintenance of relations with the various union, management, civil rights and governmental agencies that are involved in the problem.

Another recommendation of the study has special interest to guidance counselors. It points out that many interviewees blamed high school counselors and the exaggerations of civil rights leaders for their ignorance on apprenticeship information.

"Realistic information should be readily available on such matters as the number of apprenticeship openings likely to be available each year in a given city, as well as qualifications and procedural details for applying to these programs."

And also: "While counselors cannot be blamed for all of the ignorance surrounding the apprenticeship question, very few of them seem to give realistic advice to Negro youngsters concerning apprenticeship training. In part, this is because counselors have become convinced that Negroes cannot get into these programs. However, our evidence also indicates considerable bias by high school and other employment counselors against apprenticeship programs."

(*Note*: The U. S. Department of Labor, Manpower/Automation Research Monograph No. 6, "Negroes in Apprenticeship," is essentially a sequel to the book. Single copies may be obtained free upon request to the Office of Manpower Research, U S. Department of Labor, Washington, D.C. 20210)

TOPIC FOUR: Utilizing Total Educational Resources (Vocational and General) To Adequately Provide Vocational Opportunities for Employed and Unemployed Workers

1:7 "Results of an Exploratory Study of Functional Illiterates in Macon County, Alabama" by Theo. J. Pinnock. Tuskegee Institute, Tuskegee, Ala. (Project # 5-0023) 1965. (VT # 002-478) 136 pages.

It is hard to think of illiteracy as a condition that persists in jet age America. But it does. And the large numbers of people who cannot read and write, whether they live in the rural south or the urban ghetto, represent a multitude of personal tragedies and a national disgrace. The Tuskegee Institute study of functional illiteracy is a shocking revelation as it points up in graphic detail the nature and scope of the problem.

The main objective of this project was to comprehensively identify the problems of functional illiteracy in Macon County, Alabama. The variables contributing to illiteracy were examined in terms of the functional illiterate persons, their status and self-image, educational level, economic and civic activities, and health and nutritional practices.

The secondary objective was to conduct a limited experimental teaching program for functional illiterates in three communities.

In 1950, 835 Negroes and 35 whites living in rural areas had not successfully completed one year of schooling. In 1960, 995 Negroes and 50 whites had not completed one year of school. This rise in illiteracy suggests that illiterates foster illiterates, setting in motion a most vicious and miserable circle.

The socioeconomic and cultural problems faced by these illiterates are manifold. Machines are replacing unskilled workers. Farmers leaving the land and unskilled workers cannot be retrained at their educational level. There has been much evidence that

and an increase on the basis of achievement. Another group meeting only twice a week rather than three times a week, was not offered a monetary incentive.

Investigators were very satisfied with participation and interest. The assumption that illiterates will not participate in educational endeavors was proved wrong. The understanding and experience of the teachers who prepared the adults contributed to high participation. The attrition rate for attendance from February to May was only eight percent.

Older participants showed an increase of grade equivalent of more than twice that of younger participants. The indication is that increase is due to the way the stipend was given on a competitive basis. The investigators assume that fixed stipends guarantee attendance but only motivate the learner if prorated and paid within the framework of performance.

The I.Q. test was administered at the beginning and end of the program. I.Q. tends to rise as the environment improves. Since the investigators could not improve the physical environment it is the academic work that caused the significant leap in I.Q.

Many participants felt that the classes were too short. Most liked the courses in civics and mathematics, since these fulfilled immediate needs.

Recommendations

The investigators feel the following recommendations will have a lasting effect in improving the conditions of functional illiterates:

1. Illiterate adults should be exposed to continuing programs of formal education and skills training.

2. Government policy in giving stipends to persons who participate in adult education programs should be changed. Allowances should be prorated not in terms of family size but in terms of performance in the training programs. Such stipends are needed

and will have to be only high enough to motivate.

3. Administrators of county welfare rolls should be required to attend a three-week work-log on college campuses in which they would be exposed to lectures and discussions on subjects relative to their role and responsibilities in liberalizing education for all. These work-logs should continue over a five-year period during which time changes in policies toward illiterates may be made.

4. Higher institutions of learning and other agencies should initiate programs for self-help learning aimed at federally employed guidance counselors for poor and illiterate families.

5. Special attention should be given to illiterate adults who are victims of the share-cropping system.

6. Teachers, counselors and other personnel who are to work with functionally illiterate adults must be carefully selected by "experts" if maximum results are to be achieved. Two or three months of on-the-job/off-the-job training would be advisable.

4:8 "A Review and Appraisal of Adult Literacy Materials and Programs" by Robert F. Barnes and Andrew Hendrickson. Ohio State University, Columbus, Ohio. (Project # 5-0667) 1963. ERIC # ED 005 519. MF $.36 HC $8.72. 262 pages.

The study of 35 adult literacy programs in 15 states was conducted to identify factors that underlie problems in the teaching-learning process as it applies to the development of basic skills in the functional and totally illiterate. An observation team of four collected "mainly subjective" data by way of interviews with administrators, teachers and the illiterates themselves. Also included in the report are surveys and appraisals of published materials and a review of research on instructional materials, tests, methods, and programs for adult literacy education.

The sections relating to the visits to adult literacy programs were presented in a series of narrative reports. Topics herein discussed were students, teaching staff, program administration, motivation of students, forms of learning, and use of instructional materials.

Interviews with teachers throughout the 35 programs revealed that all

[illegible] research [illegible]

[illegible] principles as they [illegible] adult illiterates.

[illegible] of the slow reader as [illegible] adult illiterates.

[illegible] dynamics in the adult [illegible] classroom.

[illegible] relations.

[illegible] short- and immediate [illegible] of the individual student.

[illegible] attitudes, measurable [illegible] objectives.

[illegible] of objectives around the individual's needs and goals.

[illegible] evaluation.

[illegible] and evaluation of instructional materials.

[illegible] supplemental materials to meet individual needs.

[illegible] and the place of testing in the program.

The series of interviews also identified four characteristics that were considered especially desirable for teachers of illiterates. These were: (a) ability to accept the student as a human being who is capable of learning; (b) ability of the teacher to subjugate his middle class values and attitudes; (c) flexibility in classification of students' immediate short-term goals, and (d) imagination, creativity and flexibility.

Suggested Research

The section which proposes 21 research questions for further investigation may be the most significant contribution of the project. Among the areas for research topics are the following:

—How important is it to the total learning process of the adult illiterate that the immediate, personal objective [illegible] be reached?

—How important to the success of the learning process is it that the teacher make the adult illiterate aware of the "rules" of the learning process?

—Are there new qualities that a teacher of adult illiterates must possess that are different from those found in successful teachers in any other field of education? If so, what are they and are they qualities that can be developed?

—Do classes which allow and even encourage the adult students to enter into the [illegible] classes group in relative small [illegible] classes?

—Repetition is a learning process that has been observed under latent learning . . . Why is there a need for so much repetition? Is it possible that other forms of instruction could eliminate much of this repetition? Could teaching principles in the transfer of learning decrease repetition?

—What is the actual level of student anxiety in testing for initial placement? What can be done to obtain placement data without addition to the student's anxiety? Do diagnostic batteries have a role in initial placement?

The three-fold question asking whether special qualities are needed for teachers of adult illiterates and, if so, what they are and can they be developed, could also be applied to other teachers, particularly those with responsibilities for handicapped and disadvantaged students. A related question may be, are teachers of the handicapped made or born? Which qualities are more important to teaching success: those coming from personality and attitude, or the ones developed through specialized training?

The effect that adult student participation in instructional planning has on student morale, commitment to learning and levels of achievement is also worthy of further study. Although the principle that student involvement improves learning is well supported by elementary school research, its efficacy in teaching situations involving out of school youth and adults needs additional testing.

4:9 "STANDARDIZATION OF A SPANISH LANGUAGE ADULT INTELLIGENCE SCALE" BY RUSSELL F. GREEN AND JUAN N. MARTINEZ, UNIVERSITY OF PUERTO RICO, RIO PIEDRAS, PUERTO RICO, (PROJECT # 5-0803) 1967. (VT # 665-679) 258 PAGES.

The urgent need for a project to develop a standardized Spanish language adult intelligence scale was supported by the author's statement that: "Numerous psychologists and agencies throughout Latin America have been using inadequately developed forms with inappropriate norms for many years. In-so far as could be determined, this is the first instance of an adequately developed and standardized intelligence scale in the [illegible] America. . . . The use of inappropriate norms . . . almost surely paved the incorrect labeling of, and therefore improper attitudes toward, individuals. Such labeling and attitudes can have profound effects on the individual all their lives."

There were four general goals established for this project, which were to be achieved in the time sequence as they are listed:

1. To produce and standardize in Puerto Rico an individual intelligence scale written in the Spanish language and adapted to Spanish culture for the age range 16 through 64.

2. To develop *a test and a procedure* which will make it possible to adapt the test to other Spanish American countries with a minimum of cost and effort.

3. To develop information which will allow for an automatic correction factor which will adequately account for much of the time related to shift in mean score that is normal for tests of this kind.

4. To incorporate into the overall effort the investigation of a variety of questions of general interest.

Existing Tests Adapted

By permission of the Psychological Corporation, the project undertook the task of adapting the Wechsler Adult Intelligence Scale (WAIS) for use among Spanish-speaking adults. The advantages of adapting existing tests, rather than developing a completely new instrument, are given. Included are arguments that there is a known model to follow; large amounts of information, especially concerning validity, are available; and general criteria for scoring are available and can be used as a guide in setting up scoring keys for the new test. "In short, very large amounts of work need not be repeated."

The first step of the project was to make a direct translation of the Wechsler Adult Intelligence Scale into Spanish. The initial translation, made by Dr. Carlos Alluzi-Miranda of the Department of Psychology, University of Puerto Rico, was reviewed and revised by other members of the same department. These translators also initiated a study of work frequencies in order to develop a guide as to word order in the vocabulary subtest and in order to find possible alternates for

...included in the English ...

The materials from these sources were ... to eliminate all test items ... that in any way appeared to be specific to the culture of the United States. New test materials were then ... added into an experimental form of the test. This form was about 25 percent longer than the final version was expected to be. Two linguistic experts, specialized in the study of regional and national differences in the use of Spanish, were retained. They were asked to base their revision on four criteria:

1. The Spanish used was to be correct although the emphasis was not to be on producing a high literary style.

2. The instructions were to be as simple and concise as possible.

3. The parts of the instructions to be read to the subjects were to be expressed in colloquial language which would be as clear, simple and precise as possible.

4. The verbal materials were to be as meaningful and fair as possible for all the various subcultures of Spanish America.

Following a tedious process for examining and field tryouts of test materials, all subjects were further pretested by administering them to two groups of subjects who were known to be widely different in intellectual ability. Any item that failed to differentiate between these two groups was dropped from the test.

A representative sample of about 250 persons from the population of Puerto Rico was then tested. In order to assure that this relatively small population was a truly representative group, the subjects were chosen by a multi-stage, partially urban-rural stratified, random sampling.

The Standardization Phase

A sample of 1,176 rural and urban Puerto Rican residents was selected for the ... standardization sample. Six variables in the population were identified for the organization of data. These six were age, sex, urban-rural residence, geographical location, occupation, and education. Statistical data obtained from scoring the tests were processed through an IBM 7074 facility at the University of Rochester, Rochester, N.Y.

The results of the study ... Item data from the first experimental group ... pre were all favorable except for one very important point. The test proved to be too difficult for the general population. It also revealed that the test had a much higher ceiling than was needed for the population.

When discussing validity of the test, it is pointed out that there could be no direct validity evidence at this time. It is suggested that validity for predicting success in school may prove to be fairly good as the correlations between test scores and years in school were comparable with corresponding correlations in the States.

The main value of this Spanish language intelligence test will be to the people of Latin America. It also should prove useful in sections of the United States that have large numbers of Spanish-speaking people. The clear and orderly description of procedures needed to adapt a test from one language to another, and the steps that must be taken to standardize a test, comprise another interesting aspect of the study.

TOPIC FIVE: Guidance and Placement Services and Follow-Up Studies

4:11 "CAREER DEVELOPMENT" BY WARREN D. GIBBONS, REGIS COLLEGE, WESTON, MASS. (PROJECT # 5-0053) 1966. (VT # 002-111) 218 PAGES.

Career guidance—the orientation and instruction of young people to help them make realistic and meaningful plans and decisions concerning immediate and future employment goals—has certainly had less than sensational success in our public schools. Many high school graduates and dropouts now enter the labor market with insufficient specific information of the employment world and with little insight into their own real capabilities and aptitudes.

Once out of school, their ranks are augmented by job drifters and a growing new breed of floundering young adults—college dropouts. All of these people are in desperate need of counseling and orientation. More significant over a long haul is the need for correcting the weaknesses of the secondary school guidance programs that failed them in the first place.

The Regis College longitudinal study, which is still in progress, gives attention to the problems associated with unrealistic self-concept, immaturity and social pressures that affect a young person's career choice. It is a carefully designed experimental study that should be valuable for all persons who have concerns for this basic education problem.

When speaking of the traditional guidance approach to career orientation, the report states:

"One of the most serious frustrations facing guidance counselors today is their inability to predict what the future holds for their counselees. . . . The traditional guidance approach has been to help the pupil acquire information about the world of work

occupational

often fails because
knowledge avail-
which traits are pre-
to a particular occupa-
It fails to examine
general pressures exerted on the
and that interests and val-
may not have been stabilized for
youngsters who are asked to
these vital decisions and

Series of Objectives

The plan for the study was set forth in a series of objectives:

1. Test the theory of occupational choice which proposes a process running through a sequence of developmental stages.

2. Determine whether there are significant sex differences in career sequences.

3. Describe in detail 111 real career patterns over 8 years of development, and seek unifying mathematical and psychological models for them.

4. Determine the extent to which career decisions are based on selecting self-concept and other factors.

5. Accomplish a successful multidimensional scaling of early vocational maturity from interview protocols, naming the resulting scales, as a set, Readiness for Vocational Planning (RVP).

6. Explore the statistical dependence of numerous criteria of career development on the RVP scales, with the criteria being collected in three-, five- and seven-year follow-up interviews.

At the time of this report, the emerging careers of 57 boys and 54 girls had been traced from the eighth grade to two years past high school. Five communities, all within 25 miles of Boston, were selected for the study. The number of subjects was limited by the cost in time and effort needed to conduct personal interviews. The study group was selected by means of a random number table in each of nine participating eighth grade classes. Subjects selected were classified in accordance with I.Q., age and socio-economic status.

A standardized personal interview was used to gather data for study of career processes in career planning. Four interview schedules, used during the three spans of the study, were developed along the lines of Super's Career Pattern Study of the Vocational Maturity of Boys.

Testing the contribution of Frank Parsons, Donald Super and Harold Hickman to Vocational Guidance, the author enumerated a number of implications of the study that relate to the theory of career and to career counseling. Here discussed are: vocational maturity as a most meaningful developmental concept; the need of special career guidance by lower socio-economic groups; and the importance of counselors determining students' apparent and hidden motives in stating occupational goals.

A most significant recommendation for vocational educators may be found in the statement, "The delay of one or more years in forced curriculum choice, as advocated by many vocational psychologists, may be unnecessary for one group (High RVP), and the other group (Low RVP) apparently would not profit substantially."

A summary of preliminary specifications proposed to prepare individuals to make thoughtful career planning decisions contains a series of recommended activities, based on Tiedeman's Harvard studies on career development, which begin in kindergarten and continue in three year blocks through the elementary and secondary years, the first job and on to post-entry jobs. The implications of this concept of developmental occupational orientation as well as the operational patterns that may evolve, should certainly be known by all persons associated with vocational schoolwork.

4:12 "HIGH SCHOOL DROPOUTS: FATE—FUTURE—IDENTIFICATION" BY RALPH O. GALLINGTON. SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE, ILL. (PROJECT # 5-0700) 1966. (VT # 005-611) 54 PAGES.

The Southern Illinois University study of high school dropouts was motivated by concern over an observed high dropout rate in Alexander County. Questions were asked concerning the status of dropouts and graduates, the characteristics of potential dropouts and what remedial practice would retard the dropout rate.

The first section of the study attempted to identify differences between high school graduates and dropouts in such areas as family, marital status, parental education, economic status, and attitudes. Fifty cases were selected for study purposes, and an interview outline for collecting data was prepared. In each case, the home of the subject was visited. 63 graduates and 57 dropouts were studied.

Identifying Potential Dropouts

The second part of the study dealt with the validation of two instruments which had previously been constructed to identify potential high school dropouts in Southern Illinois. One, a subjective instrument, had been developed for use in cases where lack of uniformity of school cumulative record systems limited the effectiveness of the objective instrument.

It was stated that by making an identification of the potential dropouts in the schools, teachers, counselors and school administrators in the local area could plan more appropriate programs. It was thought that this study might assist also in discovering some of the faults of the high school programs from which dropouts had withdrawn.

Common Characteristics

The series of interviews given to graduates and dropouts revealed that there were a number of discernable characteristics that could be associated with each group. These were summarized in a series of generalizations that include the following:

—The high school graduate had demonstrated more initiative than one who had dropped out.

—The graduate tends to delay decisions of commitment such as marriage, employment and the like until he is prepared better to accept responsibilities.

—The migration of graduates is greater than that of dropouts.

—The graduate seems to be less dependent on others than the dropout.

—Graduates recommend high school graduation; dropouts seemed to prefer not to discuss the subject.

—Generally, the immediate job opportunity for a dropout is common labor, and then only if such work is available.

Tentative correlates for identifying potential high school dropouts, which were available from preliminary studies, were compared with the test scores of actual graduates and dro-

vers. Correlation coefficients of .31 for the subjective instrument and .326 for the objective measure were obtained. Among 12 conclusions drawn from this section of the study are the following statements:

--Graduates may be identified fairly by the instruments developed, but the values at cut-off points seem to indicate that the instruments may be of value in identifying potential dropouts in large numbers.

--As many previous studies have shown, the greatest objective predictors were (a) Achievement; (b) Reading Placement, and (c) Mathematics Placement.

An accumulation of several correlates was found to be much more predictive of graduation or not. The bi-serial correlation formula measures this fairly well and permits the development of satisfactory total measures.

This and other studies relating to school dropouts should be of general interest. Knowledge gained about the socio-economic, personal and educational factors of early school leavers should be useful in developing both preventative and rehabilitative measures. This investigation, similar to a number of other school dropout studies, deals mainly with the qualities found in students who are dropout prone. The influence of the school--curriculum, attitudes and methods employed by teachers, class size, grouping and scope of meaningful guidance --will need to be treated in other research projects.

1:15 "A Guidance Project To Investigate Characteristics, Background and Job Experiences of Successful and Unsuccessful Entry Workers in Three Selected Industries" by Robert E. Gorman, University of Montana and Montana State Dept. of Public Instruction, Helena, Mont. (Project # 6-2147) 1966. (VT # 002-799) 30 pages.

This project was conducted over a nine-week period of the summer of 1966 by a selected group of 14 certified school counselors. They were employed in field research investigations while being actively employed as unskilled and semi-skilled laborers in three industries: mining, lumbering and construction.

"The major goal of the project was to provide school counselors with a work-research experience which, as they returned to their positions, would contribute to their becoming more competent vocational counselors of non-college bound youth."

The on-the-job investigation concentrated on:

1. Discerning the characteristics, backgrounds and job experiences of successful and unsuccessful entry workers.

2. Determining how school experience and vocational education contribute to success of entry workers.

3. Examining the effect of environmental and economic background on entry job success.

4. Discovering job variables which contribute to early termination of entry workers.

Motivation for Study

Industrial management and union officials were concerned by surveys in one industry which revealed that there was a 34 percent turnover of entry workers within the first 30 days of employment. Employers, employment agency officials, union leaders, and educators hypothesized that the school curricula inadequately met the needs of non-college bound students. Furthermore, they presumed that young entry workers had not received appropriate counseling. Surveys revealed that less than eight percent of potential wage-earners in the region had received vocational education.

The report stated that generally there had been a lack of emphasis on vocational guidance programs. Counseling and guidance personnel in high schools seemed to respond to college-bound students while neglecting the future dropout and non-college bound youth.

The report suggested that higher educational institutions had established this pattern of emphasis. "Training programs in counselor education institutions have stressed areas of instruction relating to counseling the academically able. . . . Not included in the prospective counselor's work backgrounds are significant [illegible] work that [illegible] likely [illegible]."

Recommendations

At the conclusion of their work-research period, the investigators compiled constructive recommendations based on their on-the-job investigations, field diaries, and personal impressions. The suggestions are standard precepts for counselors. Since the report implies that they have generally been neglected, they need to be restated.

1. Counselors need work experience in industries which provide entry job opportunities for non-college bound students.

2. Counselors should encourage personnel management and other prospective employers to visit schools and talk with students who are potential entry workers.

3. Students who are non-college bound should be identified, as early as possible, and be guided into vocational education programs.

4. Potential entry workers should be given summer jobs with possible future employers. A liaison between counselors and industry personnel should be established.

5. School counselors need to inform the students about the nature and requirements of work experience.

6. Counselors should conduct a follow-up of former students who have been employed.

7. Counselors ought to evaluate school curricula for non-college bound youth.

8. Counselors need to work toward establishing a joint industry-education board to facilitate evaluation of vocational education curricula and to ease the students' transition from school to job.

9. Industry-bound students need orientation to the value and worth of entry industrial employment, since attitudes formed toward the first job experience establish a precedent for future conduct.

Counselors Need Job Experience

The summer period was found to be too limiting for a fully realized sociological study. Nevertheless, the work-research project seems more advantageous and enlightening than no experience at all. The investigators who had previously enjoyed sedentary

an integral part of the training of counselors? Certainly, it would help them to better fit and coordinate with other basic college preparatory courses. If counselors with real work experience are available in higher educational institutions, then the training programs might lift their emphasis and offer opportunities for practical employment within the curriculums.

The third recommendation of the

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[illegible]

and not consistent with good guidance practice.

[illegible]

THE RESEARCH STUDIES which have been reported in this [illegible] give attention to such items as teaching methods, learning theory, early identification of school dropouts, and training programs for guidance counselors and home economics teachers. Among the group are some important contributions to knowledge. These studies are generally high quality efforts, with carefully selected topics and well [illegible] designs and procedures.

Notwithstanding the value of these investigations to the field of adult education, there are areas of interest relating to the vocational instruction of out-of-school youth and adults that still need attention. There has been no extensive study, for example, to determine what combination of courses and programs would constitute an adequate local program of adult vocational education or what criteria would be used to evaluate such a program. It is not known how many adult courses are now offered merely because facilities and teachers are available, or what proportion of programs for adults are based on careful analysis of individuals' interests and available job opportunities.

How Can More Adults Be Reached?

The study of information seeking—how adults find out about adult education opportunities—revealed that persons taking advantage of adult programs tend to come from higher socio-economic sectors of the population. Could further exploration help determine what channels of communication are most successful in reaching other social and economic ranks? And what specific forms of education—basic—exploratory—remedial—avocational—vocational—are now not provided but are needed?

Recent research emphasizes the need for greatly expanded programs and services for out-of-school youth and adults. When the average unemployment rate in some Negro urban slums approaches 30 percent of the work age population, it is obvious that technological unemploy-

ment is here. And now. As manual, menial unskilled and semi-skilled jobs continue to diminish, the demand for permanent and comprehensive programs of continuing, year-round, night-and-day career oriented education, available for all people in all locations, is a pressing and urgent need.

We are at the threshold of a revolutionary new concept in American education—"free continuing schooling for all." In some respects, this cause is as universal and significant in scope as the movement for free public high schools during the first half of the nineteenth century, and the subsequent development of land grant colleges.

Who Will Do the Job?

The problem is no longer whether universal career-oriented, continuing education is necessary. The important question at present is, "Who will do the job?" What administrative organization is best equipped to provide a permanent base for adaptable and extensive programs of occupational guidance and training of less than college grade? The school district? Community college? The State? The Federal Government?

The local school district, as the administrative unit closest to the people, is a logical first choice. But very real obstacles stand in the way. First, under existing systems of taxation and finance for educational purposes, school districts are not getting enough money to meet their current responsibilities. Also, the problem is with school people themselves. Long associated with academic matters, too many school teachers and officials—even some in vocational schoolwork—fail to identify with those people

...school programs who need their help. ...community college may also seem a logical vehicle ...universal provision of continuing adult education. ...even if the institution is "all college" and ... ...from organization and design of physical ... ...all dominated by college-oriented thinking ... ...college accreditation policies, the occupational level ... ...will surely suffer.

...on post secondary vocational education, *... and Work*, calls attention to ... of the ... providing ... school-college-level vocational ... through the two-year college. If the two-year ... is to be the setting for universal continuing ... provisions will have to be made to insure that ... people from all backgrounds will be welcome--and ... want to come--at the periods of time that will be most ... to them.

Other Questions Raised

In the educational organizations now under development, does the administrator of adult vocational education have sufficient status and authority to carry out an effective program, or are his hands tied by college-related administrative policies? And will the teacher of Beauty Culture find happiness as a college professor?

What about state or county operated secondary schools not associated with a collegiate program? There may be hope here, too. Connecticut and Wisconsin have developed excellent adult vocational programs through their regional, state-operated vocational and technical schools. The county vocational and technical high schools of New Jersey and Pennsylvania also have some outstanding vocational programs for adults.

A question may be raised for proponents of comprehensive high schools as the relative benefits for students attending comprehensive vs. separate vocational high schools are debated and tested. The adult vocational program has been a significant community asset in specialized vocational schools. However, they are virtually nonexistent in many so-called comprehensive schools. As plans are made for more comprehensive high schools, what provisions are being incorporated in them for adult vocational education? And if the adult vocational program is not be... ...ing considered, what assurance is there that educators ... are available and prepared to do the job?

Some have expressed the fear that universal continuing education will be administered by the Federal Government. Yet how a federal agency or combination of federal offices could possibly handle all phases of continuing vocational education at the operational level, for all persons in every community in the nation, is hard to comprehend.

The real purpose of federal money, regardless of the agency, has been to plant the seeds for local progress and initiative. So far, the small amount of local participation in adult vocational education, when compared with the burgeoning urgency of the national situation, has forced a greater degree of federal action. Actually, the seemingly impressive sums of federal Manpower dollars expended so far have been mainly limited to emergency job training measures for hard core unemployed in selected pockets of greatest concern. Under present proposals there would not be enough federal money to blanket the country with the permanent facilities and programs for adults that are needed.

Opportunity School

Many AVA members who attended the 1966 convention in Denver visited the Emily Griffith Opportunity School. Operated by the Denver Board of Education, the Opportunity School is built upon a simple humanitarian principle: "Any individual should be served when the help is needed --not when it is convenient to the school."

Initiated by a remarkable woman for whom the school is named, and further developed by Russell K. Britton and other outstanding Denver educators, the Emily Griffith Opportunity School now has more than 30,000 enrollments each year in a great variety of adult job related and avocational programs. When considering the influence of this prestigious organization to the economic stability and social fabric of Denver, it is saddening to note how few other cities and communities have done anything that can compare.

Perhaps the need is simply for more enlightened individuals in the educational field, like Emily Griffith and Rusty Britton, than for more impersonal organizations.

RESEARCH, DEMONSTRATION, INSTITUTES REPORTED IN THIS ISSUE

Completed Studies

TORIC Cite: Expanding Education and Training Opportunities Commensurate with Needs of the Labor Force

4:1 "Patterns of Adult Information Seeking" by Parker, Edwin B. Stanford University, Stanford, Calif. (Project # 5-0083) 1966. ERIC # ED 010 294. MF $0.45 HC $11.60. 177 pages.

4:2 "The Prediction of Outcomes of MDTA Programs: A Pilot Study" by Edgerton, Harold A. and Sylvester, Robert W. Performance Research, Inc., Washington, D.C. (Project # 5-0127) 1966. ERIC # ED 010 011. MF $0.09 HC $1.52. 19 pages.

4:3 "A Training Program for Selected Home Economists To Train Adults and Older Youth for Homemaker Service Responsibilities" by Petro, Charlene. Louisiana State University, Baton Rouge, La. (Project # 5-1315) 1967. (VT # 003-212) 64 pages.

[illegible] of Speed and Prior [illegible] on Adult Trainee" by [illegible] B. and Knox, Alan B. [illegible] of Nebraska, Lincoln, Neb. [illegible] 1965. ERIC # ED 003 [illegible] Hc [illegible]. 142 pages.

[illegible] "An Exploratory Study of Knowledge in Child Development and Guidance Needed by Mothers and Workers in Occupations Related to Child Care" by Whitmarsh, Ruth H. University of Illinois, Urbana, Ill. [illegible] 1965. ERIC # ED 010 004. MF $0.27 HC $5.48. 106 pages.

TOPIC FOUR: Expanding and Improving Apprenticeship Programs

No studies

TOPIC FOUR: Utilizing Total Educational Resources

137 "Results of an Exploratory Study of Functional Illiteracy in Macon County, Alabama" by Pinnock, Theo. J. Tuskegee Institute, Tuskegee, Ala. (Project # 5-0023) 1965. (VT # 002-478) 136 pages.

138 "A Review and Appraisal of Adult Literacy Materials and Programs" by Barton, Robert F. and Hendrickson, Andrew. Ohio State University, Columbus, Ohio. (Project # 5-0067) 1965. ERIC # ED 003 509. MF $.50 HC $9.72. 282 pages.

139 "Standardization of a Spanish Language Adult Intelligence Scale" by Green, Rose E. and Martinez, Julia N. University of Puerto Rico, Rio Piedras, Puerto Rico. (Project # 5-0681) 1967. (VT # 003-639) 250 pages.

140 "Analysis of Research on Selected Aspects of Evaluation in Adult Education" by Sutton, Elizabeth W. Florida State University, Tallahassee, Fla. (Project # 5-8263) 1965. ERIC # ED 003 [illegible]. MF $.51 HC $14.59. 354 pages.

TOPIC FIVE: Guidance and Placement Services and Follow-up Studies

141 "Career Development" by Gribbons, Warren D. Regis College, Weston, Mass. (Project # 5-0685) 1966. (VT # 002-143) 213 pages.

142 "Role Behavior Assignment: Future Patterns of Education" by Gallimore, Ralph G. Southern Illinois University, Carbondale, Ill. (Project # 5-0300) 1965. (VT # 002-611) 47 pages.

143 "A Guidance Project To Investigate Characteristics, Background and Job Experiences of Successful and Unsuccessful Entry Workers in Three Selected Industries" by Gorman, Robert E. University of Montana and Montana State Dept. of Public Instruction, Helena, Mont. (Project # 6-2317) 1966. (VT # 002-709) 30 pages.

Studies in Progress

TOPIC ONE: Expanding Education and Training Opportunities Commensurate with Needs of the Labor Force

"Effects of Field and Job Oriented Technical Retraining on Manpower Utilization of the Unemployed" by Bjorkquist, David C. Pennsylvania State University, University Park, Pa. (Project # 5-0065)

"A Research Program in Adult Age Differences in Performance and Learning—Background for Adult Education and Vocational Retraining" by Kuhlen, Raymond G. Syracuse University, Syracuse, N.Y. (Project # 6-1963)

"Barriers to Employability of Non-White Workers" by Howard, Lawrence C. University of Wisconsin, Madison, Wisc. (Project # 6-2110)

TOPIC TWO: Innovative Programs, Methods, Materials, Techniques

"Experimental Program for Training and Retraining of Older Workers, Unemployed Youths and Disadvantaged Sections of the Population" by Steele, Theodore K. New York Institute of Technology, N.Y. (Project # 5-8066)

"Socioeconomic Background and Occupational Achievement: Extension of a Basic Model" by Duncan, Otis D. The University of Michigan, Ann Arbor, Mich. (Project # 5-0674)

"Missouri Adult Vocational-Literacy Materials Development, Teacher Training and Demonstration Project" by Heding, Howard. University of Missouri, Columbia, Mo. (Project # 5-0691)

"A Study of New Teaching Techniques for Adults" by Weinstein, David. Commission of Adult Education, [illegible] Study, [illegible] [illegible] (Project [illegible]

"Utilization and Interpretation of Census Data for Adult Learners" by [illegible] Wiest, A. University of North Dakota, Grand Forks, N.D. (Project # 7-8111)

TOPIC FOUR: Expanding and Improving Apprenticeship Programs

No studies

TOPIC FOUR: Utilizing Total Educational Resources

"Conference on Vocational and Adult Education in American Civil Liberties" by Mason, Alan F. Columbia University, New York, N.Y. (Project # 5-1163)

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"The Life Cycle of an Adult Education Enterprise—The Swarthmore Chautauqua." by Dillavou, George. University of Chicago, Chicago, Ill. (Project # 6-2663)

"An Analysis and Interpretation of Data on the Social Characteristics of Residents of 'Vine City,' an Urban Negro Slum" by Halvorsen, Marcia. Spelman College, Atlanta, Ga. (Project # 6-3162)

TOPIC FIVE: Guidance and Placement Services and Follow-up Studies

"Use of a Mobile Vocational Guidance Unit—A Pilot Project" by Zeller, Robert H. State Dept. of Public Instruction, Springfield, Ill. (Project # 5-0113)

"Vocational Interests of Non-Professional Women" by Campbell, David P. University of Minnesota, Minneapolis, Minn. (Project # 6-1320)

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"Differences in Attitudes of Adult Education Participants" by Knowles, Malcom S. Boston University School of Education, Boston, Mass. (Project # 7-8073)

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